

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1 - 79. (Cancelled)

80. (New) A computer-implemented method for creating a graphical program, the method comprising:

receiving user input requesting inclusion of a user interface element in the graphical program, wherein the user interface element has a block diagram associated with the user interface element before said receiving the user input; and

including the user interface element in the graphical program in response to the user input, wherein said including the user interface element in the graphical program comprises automatically including the block diagram associated with the user interface element in the graphical program;

wherein, during execution of the graphical program, the block diagram associated with the user interface element is operable to control functionality of the user interface element.

81. (New) The method of claim 80,

wherein said receiving user input requesting inclusion of the user interface element in the graphical program comprises receiving user input selecting the user interface element from a plurality of user interface elements.

82. (New) The method of claim 80,

wherein the graphical program includes a main block diagram, wherein the main block diagram is separate from the block diagram associated with the user interface element.

83. (New) The method of claim 80, further comprising:

displaying the block diagram associated with the user interface element after said including the user interface element in the graphical program.

84. (New) The method of claim 83,

wherein said displaying the block diagram associated with the user interface element comprises automatically displaying the block diagram associated with the user interface element in response to said including the user interface element in the graphical program.

85. (New) The method of claim 83, further comprising:

receiving user input requesting to display the block diagram associated with the user interface element after said including the user interface element in the graphical program;

wherein said displaying the block diagram associated with the user interface element comprises displaying the block diagram associated with the user interface element in response to the user input requesting to display the block diagram associated with the user interface element.

86. (New) The method of claim 80,

wherein the block diagram associated with the user interface element is locked so that the block diagram associated with the user interface element is not displayable from the graphical program.

87. (New) The method of claim 80,

wherein said controlling functionality of the user interface element comprises changing an appearance of the user interface element.

88. (New) The method of claim 80,

wherein said controlling functionality of the user interface element comprises changing a manner in which data is displayed in the user interface element.

89. (New) The method of claim 80,
wherein a main block diagram of the graphical program is operable to provide data to the user interface element during execution of the graphical program;
wherein the block diagram associated with the user interface element is operable to receive the data from the main block diagram and process the data.

90. (New) The method of claim 80,
wherein a main block diagram of the graphical program is operable to provide data to the user interface element during execution of the graphical program;
wherein the block diagram associated with the user interface element is operable to receive the data from the main block diagram and control a visual appearance of the user interface element based on the data.

91. (New) The method of claim 80,
wherein the block diagram associated with the user interface element is operable to receive user input to the user interface element during execution of the graphical program and process the user input.

92. (New) The method of claim 80, further comprising:
displaying a palette of user interface elements;
wherein said receiving user input requesting inclusion of the user interface element in the graphical program comprises receiving user input selecting the user interface element from the palette of user interface elements.

93. (New) The method of claim 80,
wherein the user interface element comprises one of:
a user interface control; or
a user interface indicator.

94. (New) The method of claim 80,
wherein the block diagram associated with the user interface element comprises a

plurality of interconnected nodes that visually indicate functionality of the user interface element.

95. (New) The method of claim 80,
wherein the block diagram associated with the user interface element comprises a graphical data flow diagram.

96. (New) The method of claim 80, further comprising:
executing the graphical program; and
the block diagram associated with the user interface element executing to control the functionality of the user interface element during execution of the graphical program.

97. (New) A computer-implemented method for creating a graphical program,
the method comprising:

receiving user input requesting inclusion of a user interface element in the graphical program, wherein the user interface element has a first block diagram associated with the user interface element before said receiving the user input; and

including the user interface element in the graphical program in response to the user input, wherein said including the user interface element in the graphical program comprises automatically associating the first block diagram with the graphical program;

wherein, during execution of the graphical program, the first block diagram associated with the user interface element is operable to control functionality of the user interface element.

98. (New) A computer-readable memory medium for creating a graphical program, the memory medium comprising program instructions executable to:

receive user input requesting inclusion of a user interface element in the graphical program, wherein the user interface element has a block diagram associated with the user interface element before said receiving the user input; and

include the user interface element in the graphical program in response to the user input, wherein said including the user interface element in the graphical program comprises automatically including the block diagram associated with the user interface element in the graphical program;

wherein, during execution of the graphical program, the block diagram associated with the user interface element is operable to control functionality of the user interface element.

99. (New) A computer-implemented method for associating a first block diagram with a user interface element, the method comprising:

displaying the user interface element;

receiving user input specifying the first block diagram to associate with the user interface element, wherein the first block diagram includes a plurality of nodes visually indicating functionality of the user interface element; and

associating the first block diagram with the user interface element, wherein the first block diagram is operable to control functionality of the user interface element;

wherein after said associating the first block diagram with the user interface element, the user interface element is selectable for inclusion in a graphical program such that the first block diagram associated with the user interface element is automatically included in the graphical program in response to including the user interface element in the graphical program.

100. (New) The method of claim 99, further comprising:

receiving user input requesting inclusion of the user interface element in a first graphical program, after said associating the first block diagram with the user interface element; and

including the user interface element in the first graphical program in response to the user input requesting inclusion of the user interface element in the first graphical program, wherein said including the user interface element in the first graphical program

comprises automatically including the first block diagram associated with the user interface element in the first graphical program;

wherein, during execution of the first graphical program, the first block diagram associated with the user interface element is operable to control functionality of the user interface element.

101. (New) The method of claim 99, further comprising:

storing the user interface element and the first block diagram associated with the user interface element as a component available for inclusion in multiple graphical programs.

102. (New) The method of claim 99,

wherein said controlling functionality of the user interface element comprises changing an appearance of the user interface element.

103. (New) The method of claim 99,

wherein said controlling functionality of the user interface element comprises changing a manner in which data is displayed in the user interface element.

104. (New) The method of claim 99,

wherein said controlling functionality of the user interface element comprises processing data received as input to the user interface element.

105. (New) The method of claim 99,

wherein the user interface element comprises one of:

- a user interface control; or
- a user interface indicator.

106. (New) The method of claim 99,

wherein the first block diagram associated with the user interface element comprises a graphical data flow diagram.

107. (New) The method of claim 99, wherein said receiving user input specifying the first block diagram to associate with the user interface element comprises:
arranging the plurality of nodes on a display; and
interconnecting the plurality of nodes in response to user input.

108. (New) A computer-readable memory medium for associating a first block diagram with a user interface element, the memory medium comprising program instructions executable to:

display the user interface element;

receive user input specifying the first block diagram to associate with the user interface element, wherein the first block diagram includes a plurality of nodes visually indicating functionality of the user interface element; and

associate the first block diagram with the user interface element, wherein the first block diagram is operable to control functionality of the user interface element;

wherein after said associating the first block diagram with the user interface element, the user interface element is selectable for inclusion in a graphical program such that the first block diagram associated with the user interface element is automatically included in the graphical program in response to including the user interface element in the graphical program.